

State PSC

Pre + Mains

Uttar Pradesh

Batch Starting On
5th Jan '24 | 8:00 AM

Bihar

Batch Starting On
5th Jan '24 | 8:00 AM

Odisha

Batch Starting On
5th Jan '24 | 8:00 AM

Punjab

Batch Starting On
5th Jan '24 | 8:00 AM

Jammu & Kashmir

Batch Starting On
5th Jan '24 | 8:00 AM

Haryana

Batch Starting On
5th Jan '24 | 8:00 AM

Assam

Batch Starting On
5th Jan '24 | 8:00 AM

Madhya Pradesh

Batch Starting On
5th Jan '24 | 8:00 AM

Use Code
NY24

Price: ~~17,999~~

₹14,999

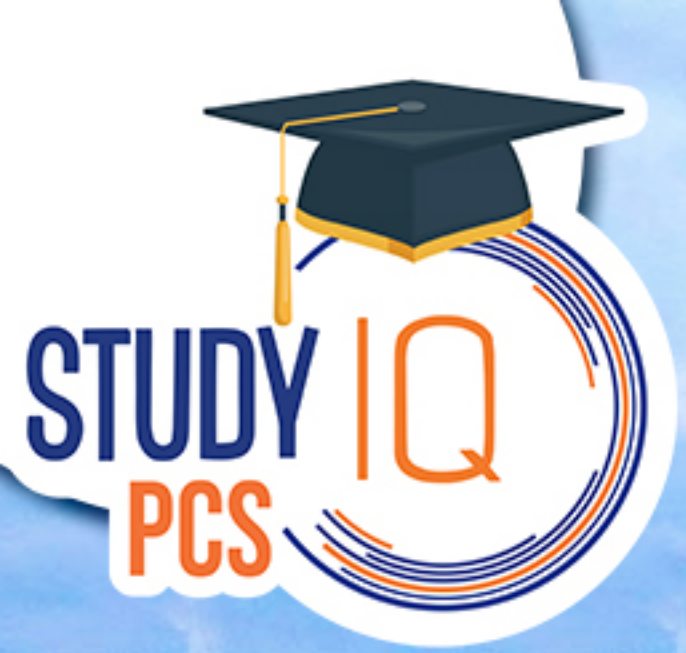


Valid Till 2nd Jan '24



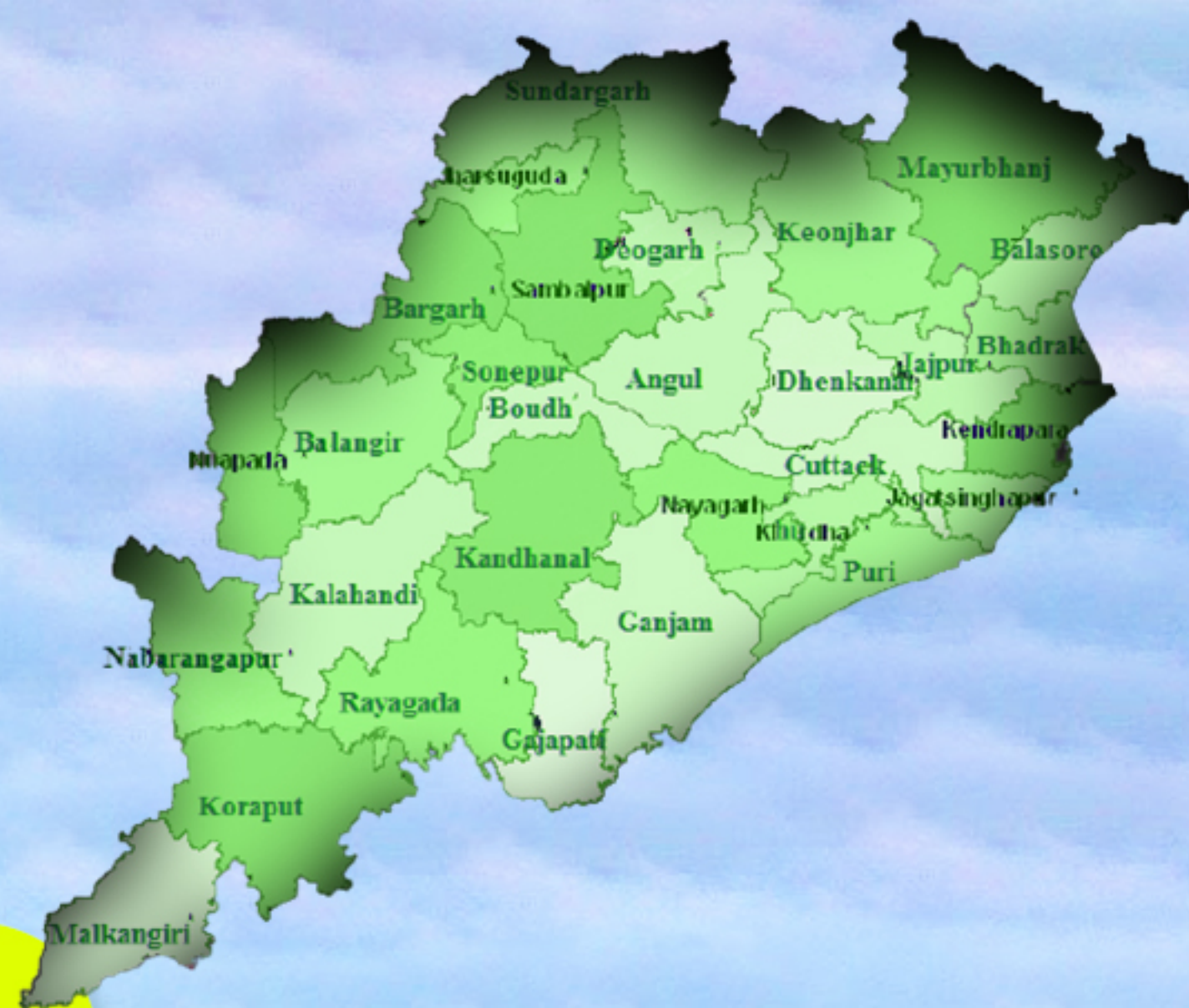
**FOUNDATION SAMPOORNA
BATCH 2**





Forest Resources

of **Odisha**



GS-1

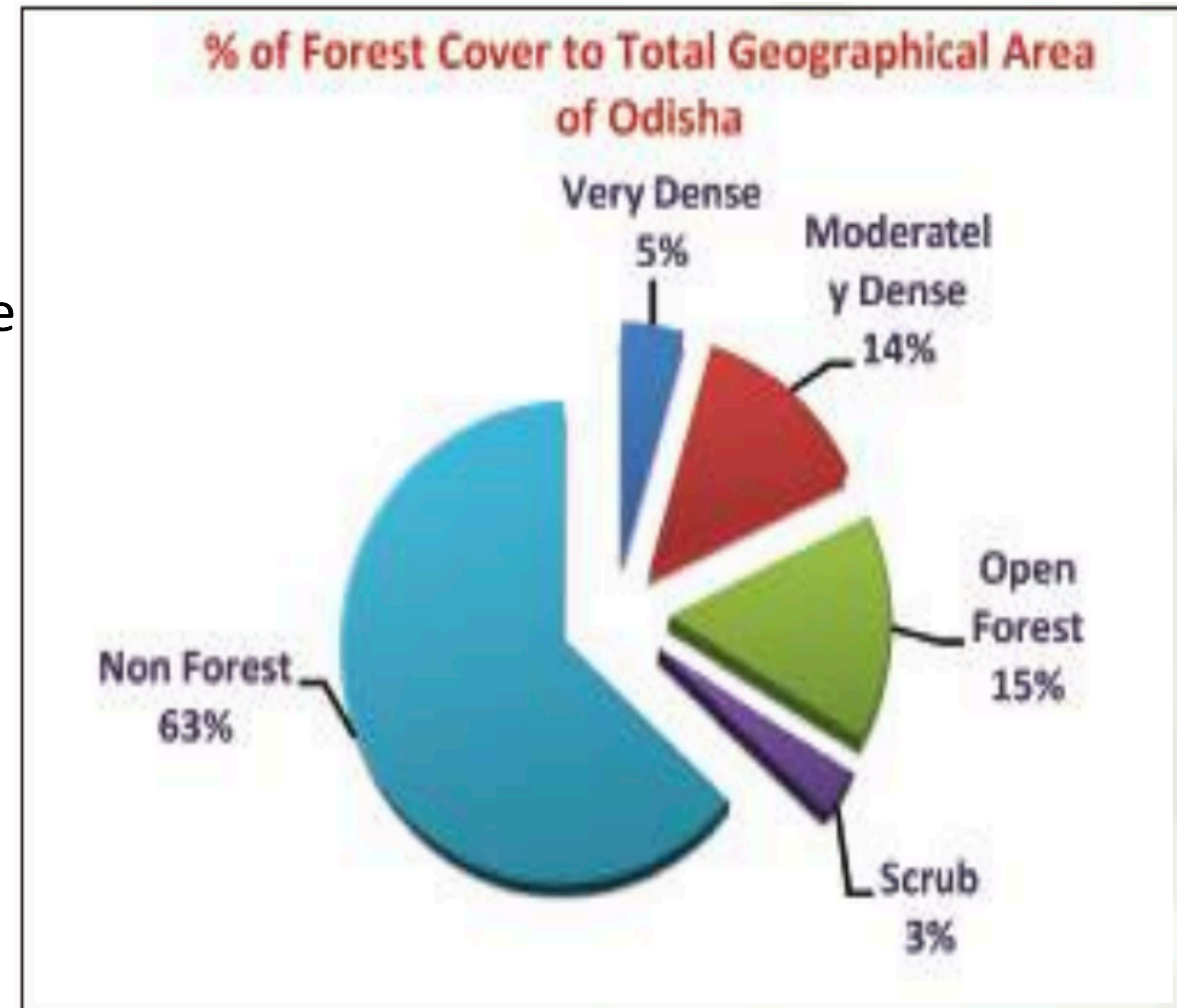
OAS Mains 2022, 2023

By- Jatadhari Nayak

Forest Area

Total Geographical Area	1, 55,707 Sq Km
Recorded Forest Area (RFA)	61,204 Sq Km
Forest Cover within Recorded Forest Area (Green Wash)	32,686 Sq Km
Forest Cover outside Recorded Forest Area (Green Wash)	19,470 Sq Km
Forest Cover Area	52,156 Sq Km
Tree Cover (Outside Forest Area)	5,004 Sq Km
Total Forest & Tree Cover	57,160 Sq Km
Percentage of Forest Area (Recorded) to Geographical Area	39.31 %
Percentage of Forest Cover Area to Geographical Area	33.50 %
Percentage of Tree Cover Area to Geographical Area	3.21 %
Percentage of Forest & Tree Cover to Geographical Area	36.71 %

- The Forest cover of the state has been categorized as Very Dense (7213 square kilometer), Moderately Dense (20,995 square kilometer), Open forest (23,948 square kilometer) and scrub (4,924 square kilometers).
- Sal is the major tree species in Odisha forests & all its associates are found profusely.
- The State has gained more than 5215 square kilometre area of forest cover since 1997.

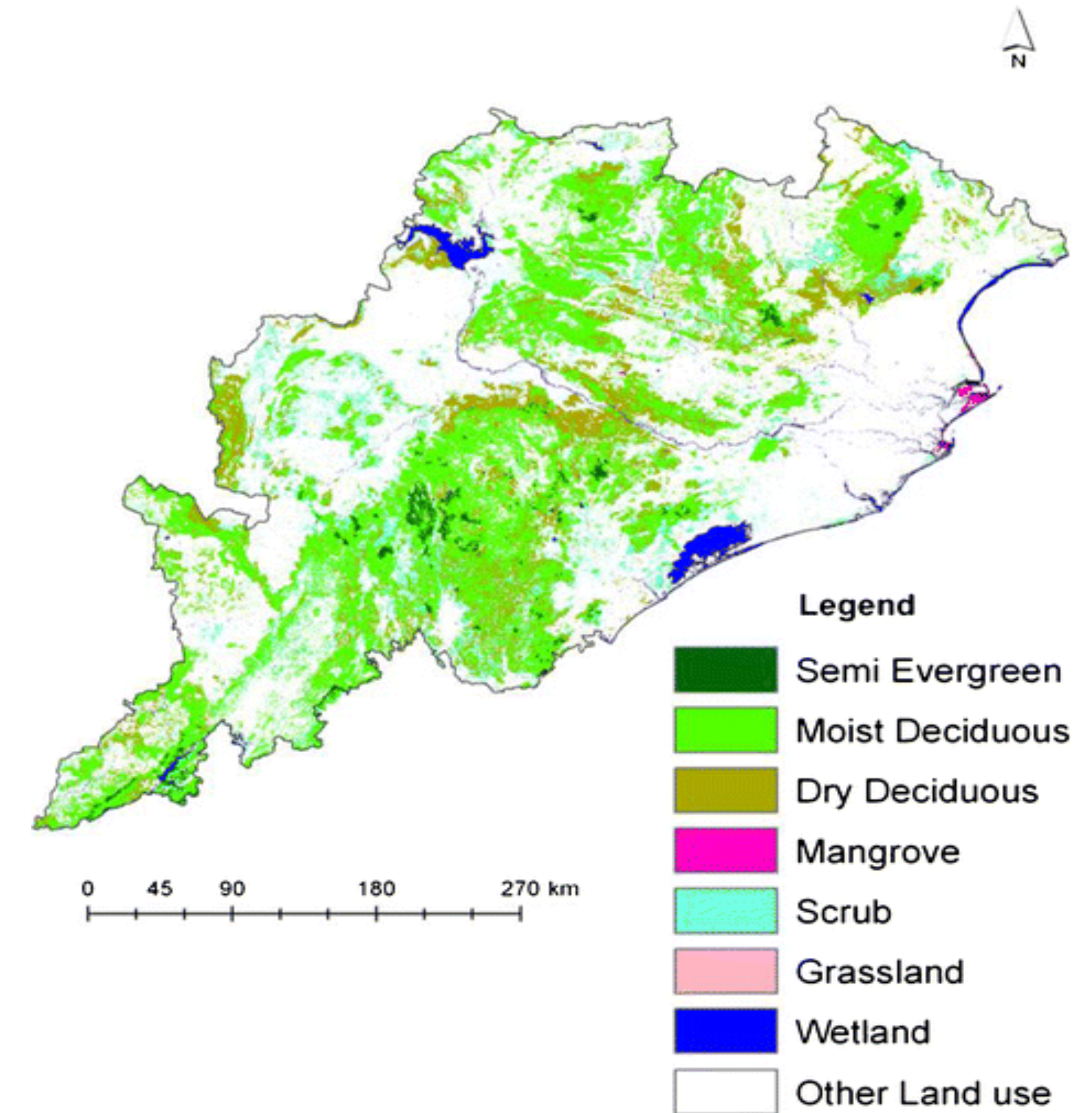


- **FORESTS OF ODISHA**

- Types of forests:

- **Tropical Moist Deciduous Forests:**

- **Area:** Tropical moist deciduous forests cover a significant portion of Odisha, especially in the central and southern regions.
- These forests cover the largest forest area of about 80% of the state.
- **Annual Rainfall:** These forests receive an annual rainfall of approximately 1,400 to 1,600 mm.
- **Types of Trees:** Common tree species include teak, sal (*Shorea robusta*), bamboo, rosewood, satinwood, and a variety of hardwoods.



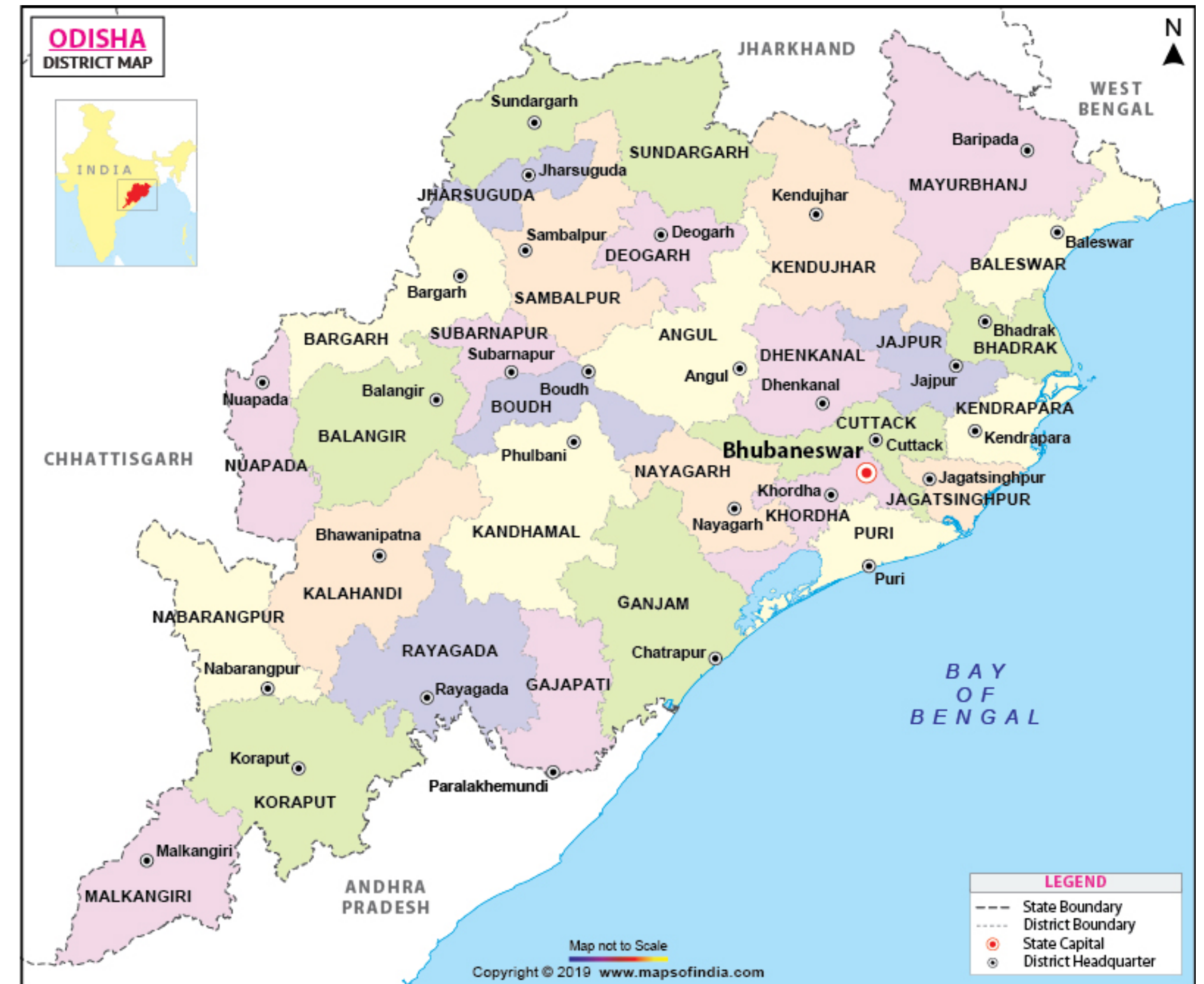
- **Tropical Dry Deciduous Forests:**

- **Second largest** by area.

- **Area:** Tropical dry deciduous forests are found in the **western and northwestern parts of Odisha**, particularly in the districts of **Sambalpur, Bargarh, and Kalahandi**.

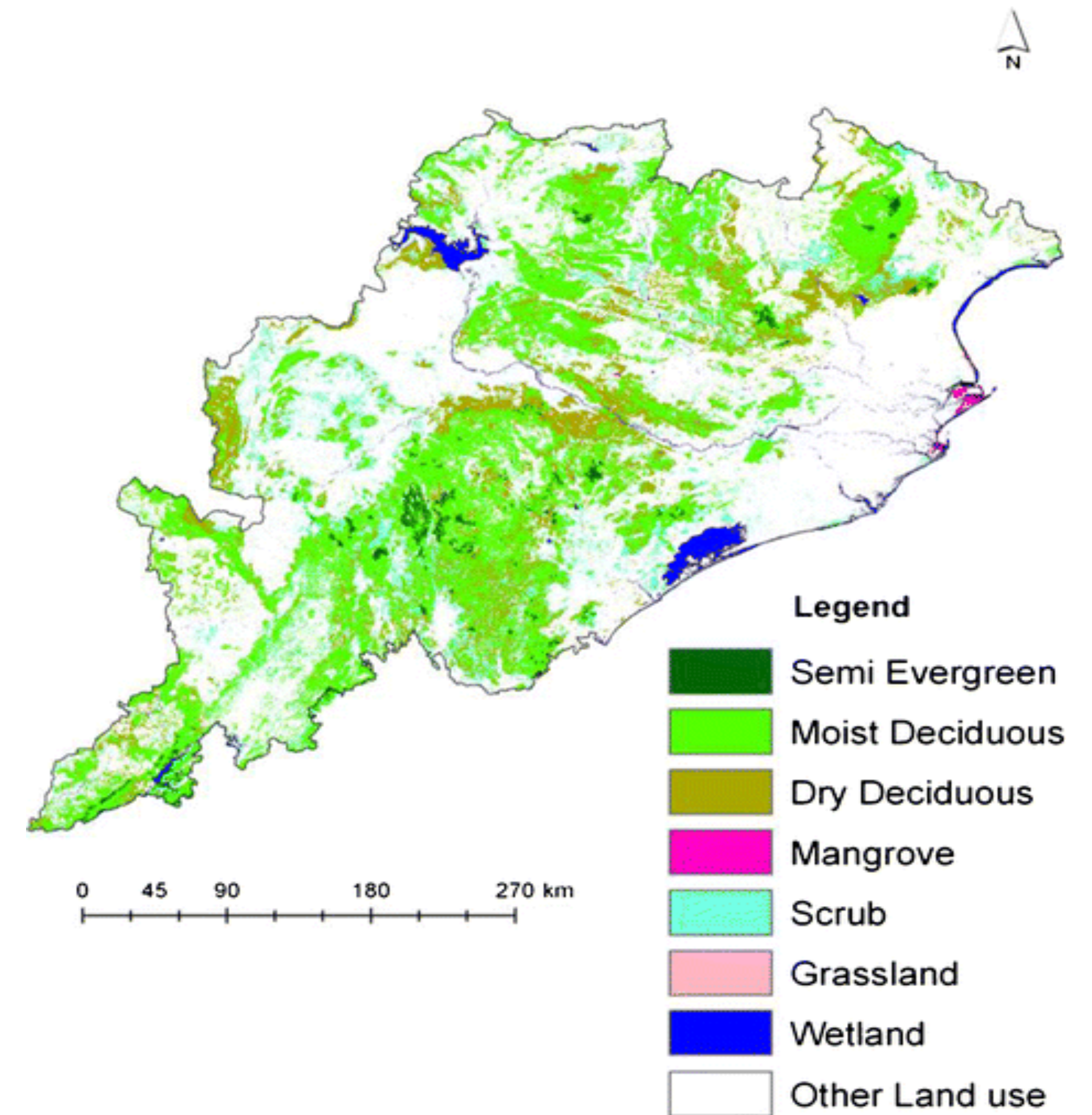
- **Annual Rainfall:** These forests receive an annual rainfall of about 1,000 to 1,300 mm.

- **Types of Trees:** Key tree species include sal, tendu, kusum, mahua, and various species of acacia.



- **Tropical Semi-Evergreen Forests:**

- **Area:** These forests are located in the **southern parts of Odisha**, near the border with Andhra Pradesh, especially in the **Koraput** district.
- **Annual Rainfall:** Tropical semi-evergreen forests receive an annual rainfall ranging from 1,500 to 2,000 mm.
- **Types of Trees:** These forests are characterized by a mix of **evergreen and deciduous tree species**, including **dipterocarps, arjun, champa, bamboos, and canes**.



- **Subtropical Hill Forests:**

- **Area:** Subtropical hill forests are found in the hilly regions of the **Kandhamal, Koraput, and Mayurbhanj districts.**
- **Annual Rainfall:** These areas receive an annual rainfall of about 1,500 to 2,000 mm.
- **Types of Trees:** Subtropical hill forests are characterized by **oak, laurel, chestnut, and various species of rhododendron.**

- **Dry Evergreen Forests:**

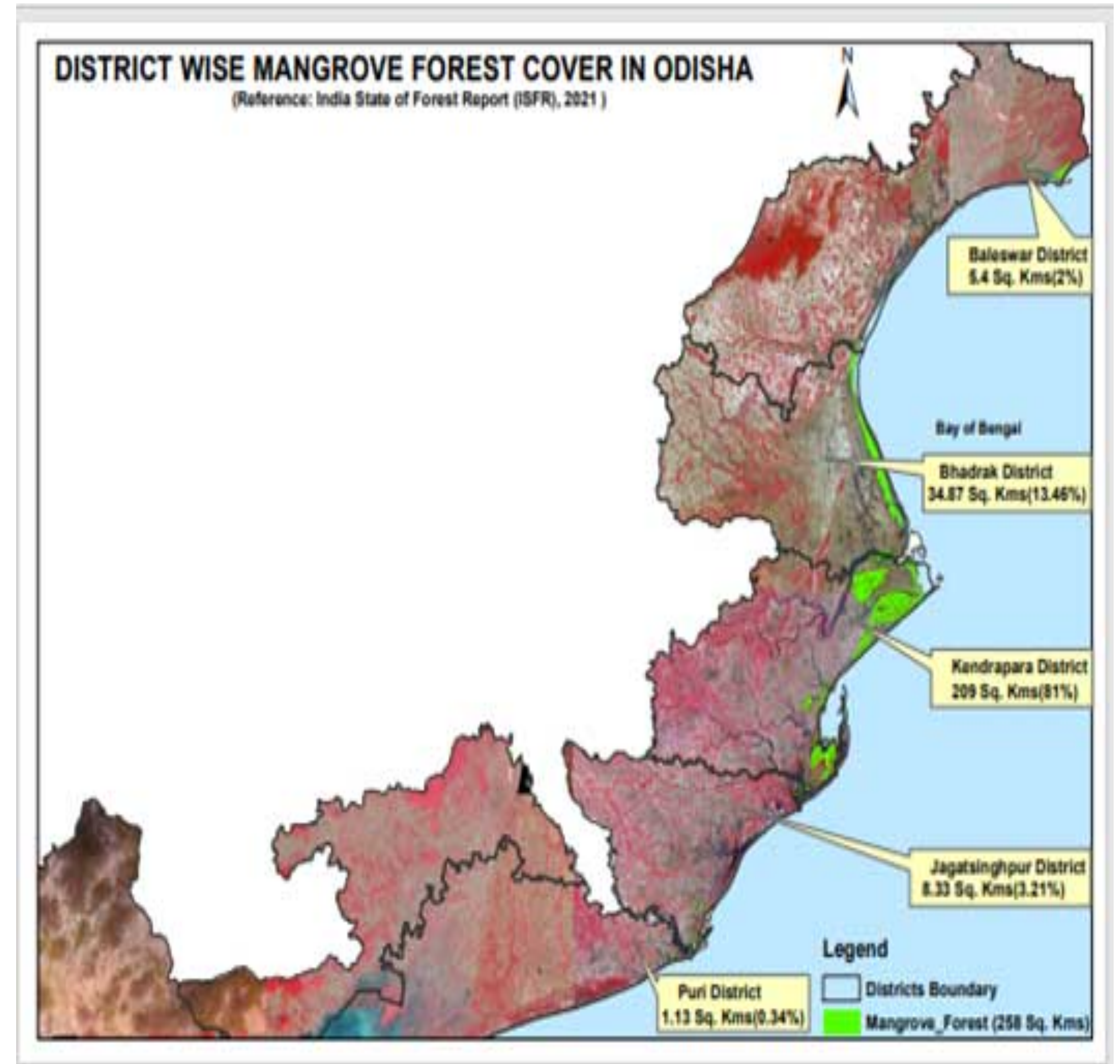
- **Area:** Dry evergreen forests are located in the southern districts, such as Ganjam and Gajapati.
- **Annual Rainfall:** These forests receive an annual rainfall ranging from 1,200 to 1,600 mm.
- **Types of Trees:** Key tree species include *Wrightia tinctoria*, *Cordia myxa*, and *Acacia catechu*.

MANGROVE FOREST RESOURCES OF ODISHA



•Mangrove Forests:

- Area:** Mangrove forests are concentrated along the coastal areas of Odisha, particularly in the **delta regions of rivers like Mahanadi, Brahmani, and Baitarani.**
- Bhitarkanika** is the largest mangrove of Odisha.
- District in terms of density:** Kendrapada> BHADRAK> JAGATSINGHPUR> BALASORE
- Annual Rainfall:** Coastal areas experience an annual rainfall of approximately 1,400 to 1,800 mm.



- **Types of Trees:** The dominant tree species in mangrove forests are the **salt-tolerant mangrove species, including *Avicennia marina*, *Rhizophora mucronata*, and *Ceriops decandra*.**
- As per the assessment of 2021, the **net increase by 8 square kilometers over the 2019 assessment**, which is the highest increase in the country.

Significance of Mangroves:

- Mangroves are **salt tolerant plant species** found in the **inter-tidal regions** along the **creeks and estuaries near the coast**, on the river mouth.
- They play a very significant role in protecting the hinterland against **(i) cyclones and (ii) the ingress of sea water during tidal surge**.
- Mangroves **stabilize coastal land mass against sea erosion**.
- Mangroves sustain the **ecological security of the coastal areas as well as livelihood security of the thousands of fisherman** and other who live in these areas.



Threat to the Mangrove:

- threatened due to **high density of population**
- Mangrove vegetation in Mahanadi delta region between Barunei mouth to Mahanadi mouth (Paradip) is fragmented and degraded due to ***large-scale encroachment of these areas.***
- sparse mangrove vegetation occurs along the coast from ***Mahanadi mouth to Devi mouth.***
- Degraded mangroves also occur to the **north of Dhamara mouth up to Chudamani in Bhadrakh District coast**, and also on **Subarnarekha mouth in Balasore District.**

Conservation measures:

- **A state level Steering Committee** under the chairmanship of Chief Secretary for Conservation and Management of Mangroves and Coral reefs in Odisha
- Mangroves of **Bramhani -Baitarani delta in Kendrapada district** have been declared as:
 - **Bhitarkanika Wildlife Sanctuary** in April 1975 covering an area of 672 Sq.km
 - the core area of the sanctuary has been declared as **Bhitarkanika National Park** in September, 1998
- Bordering the Bhitarkanika sanctuary/National Park, has been declared as **Gahirmatha Marine Wildlife sanctuary**

- Creation of a **Wildlife Division at Chandbali** in 1980 which was later renamed as Mangrove Forest Division (Wildlife), Rajnagar, with jurisdiction over the entire **coastal mangrove forests of Bhadrak, Kendrapada, and Jagatsinghpur district.**
- Bhitarkanika Sanctuary area has been designated as a '**RAMSAR SITE**' -> protection to it.
- Mangroves of **Bhitarkanika and Mahanadi delta** have been considered as a single ecological unit and have been proposed to be designated as a Biosphere Reserve.
- Implementation of **Management Action Plans (MAPs) since 2000-01** for conservation and management of mangroves at six identified locations, namely Bhitarkanika, Mahanadi delta, Dhamara, Devi-Kadua, Subarnarekha and Chilika under the central plan scheme of Government of India.

thank
you

